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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/642,642	08/22/2000	SHINGO SUZUKI	107100	9149

25944 7590 07/25/2002

OLIFF & BERRIDGE, PLC  
P.O. BOX 19928  
ALEXANDRIA, VA 22320

EXAMINER
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NGUYEN, KIMNHUNG T

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 07/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/642,642

Applicant(s)

SUZUKI, SHINGO

Examiner

Kimnhung Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This Application has been examined. The original claims 1-14 are pending. The examination results are as following.

#### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prior Art figures 8-9 admitted by Applicant in view of Nakagawa et al. (US patent 5,204,852).

3. Regarding claims 1-2, the Prior Art figures 8-9 disclose that a spread illuminating apparatus in which a square transparent substrate (2) is provided close to the surface of a liquid crystal panel (1), and a liquid crystal panel is illuminated through the transparent substrate by a bar-light source (3) which is provided parallel with the side surface of the transparent substrate, wherein a plurality of straight groove portions are formed on the surface of the transparent substrate. However, figures 8-9 do not disclose that the surface of the transparent substrate intersecting one another obliquely with respect to the four sides of the transparent substrate. Nakagawa et al. disclose in figures 3, 11 that transparent substrate including a plurality of pits and a RAM region including a plurality of guide grooves having a triangular cross section in a direction perpendicular to an information recording direction therefore, the transparent should be a manner as to intersect one another obliquely with respect to the four sides of the transparent substrate (see column 3, 23-29 and column 6, lines 39-43). It would have been obvious to one of

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ordinary skill in the art at the time the invention was made to utilize the teaching of Nakagawa et al. in the device of prior art for producing the claimed invention because this would arranged a plurality of guide grooves formed in the RAM region and a optical depths of the pits and the guide groove are arranged to predetermined value by the adjusting the thickness of the portion of the recording film on the pit and the guide groove respectively.

4. Regarding claims 3 and 9, Nakagawa et al. further disclose that wherein the groove portion are substantially triangular in cross section (see figures 3 and 11, column 3, lines 27-29 and column 6, lines 39-43). Claims 3 and 9 are dependent upon claims 1, 2, and are rejected on the same reasons determined for claims 1 and 2 above.

5. Regarding claims 4-5, 7-8, 10-11, and 13-14, Prior Art figures 8-9 disclose that wherein the interval between the groove portion is decrease as the distance from the bar-like light source, or the depth of the groove portions is increased as the distance from the bar-light source increase (see Specification page 3, lines 32-35 and page 4, lines 1-3). Furthermore, Prior Art figures 8-9 teaches that wherein the bar-like light source comprises a bar-like fluorescent tube (3) and the bar-like light source also includes a bar-like transparent light conductive member and a light emitting diode which is provided at the end portion of the bar-like transparent light conductive member (see figures 8-9, see Specification page 2, lines 27-33). Claims 4-5, 7-8, and 13-14 are dependent upon claims 1,2, and are rejected on the same reasons determined for claims 1-2 above.

6. Regarding claims 6 and 12 are dependent upon claims 1,2, and are rejected on the same reasons determined for claims 1-2 above. From the claims, it would have been obvious for Prior Art of figures 8-9 and Nakagawa et al.'s system to have the bar-like light source is in the range

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of 10 to 45 degrees as claimed since such a modification would have involved a mere change in the range of the system. A change in range is generally recognized as being within the level of ordinary skill in the art, absent unexpected results.

See In re Rose, 105 USPQ 237 (CCPA 1995) and

In re Raven, 156 USPQ 679 (CCPA 1968).

### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number (703) 308-0425.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHARD A HJERPE** can be reached on **(703) 305-4709**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D. C. 20231

**Or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only).**

Hand-delivery response should be brought to: Crystal Park II, 2121 Crystal Drive, Arlington, VA Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

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Kimnhung Nguyen

July 23, 2002

A handwritten signature in black ink, appearing to read 'Richard Huerpe', with a stylized, flowing script.

RICHARD HUERPE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800